

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

POWER INTEGRATIONS, INC.,	)	<b>REDACTED PUBLIC VERSION</b>
	)	
Plaintiff,	)	
	)	
v.	)	C.A. No. 04-1371-JJF
	)	
FAIRCHILD SEMICONDUCTOR	)	
INTERNATIONAL, INC., and FAIRCHILD	)	
SEMICONDUCTOR CORPORATION,	)	
	)	
Defendants.	)	

**OPENING BRIEF IN SUPPORT OF DEFENDANTS' MOTION  
FOR SUMMARY JUDGMENT OF INVALIDITY OF  
CLAIMS 1 AND 5 OF U.S. PATENT NO. 4,811,075**

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## **I. INTRODUCTION.**

Claims 1 and 5 of the '075 Patent are invalid in light of an earlier patent to Dr. James Beasom, entitled "High Voltage Lateral MOS Structure With Depleted Top-Gate Region" and issued as U.S. Patent 4,823,173 (the "'173 Patent"). There can be no possible dispute that Dr. Beasom filed his patent application for the '173 Patent **more than 15 months before** Dr. Eklund filed the later application for Power Integrations' '075 Patent. Thus, unless Power Integrations can produce evidence of an earlier date of invention and reduction to practice, the '173 Patent is prior art to the '075 Patent under 35 U.S.C. § 102(e).

As a matter of law, the testimony and handwritten notes of the inventor of the '075 Patent cannot alone prove an earlier date of invention. Instead, Power Integrations must provide independent evidence corroborating that Dr. Eklund both conceived of and diligently reduced his invention to practice before Dr. Beasom filed his patent application. Unable to produce any such independent documents, in its interrogatory responses Power Integrations identified four potential corroborating witnesses. During deposition, however, all four witnesses testified that they were unable to corroborate Dr. Eklund's invention. Therefore, the '173 Patent is prior art to the later '075 Patent under Section 102(e).

In his earlier '173 Patent, Dr. Beasom disclosed every element of claim 1 of the '075 Patent. Therefore, that claim is anticipated and, thus, invalid. Moreover, there is no genuine dispute that claim 5 of the '075 Patent is obvious in light of Dr. Beasom's earlier patent.

## **II. BACKGROUND.**

### **A. There Is No Dispute That Beasom Filed His Patent Before Eklund.**

On January 7, 1986, Dr. James D. Beasom filed a U.S. patent application for a high voltage MOS transistor. On April 18, 1989, that application issued as U.S. Patent No. 4,823,173 ("the '173 Patent"). A copy of the '173 patent is attached hereto as Exhibit A.<sup>1</sup>

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<sup>1</sup> For the convenience of the Court, Fairchild has highlighted the relevant passages of certain exhibits in yellow. In all such cases, the highlighting has been added by Fairchild and is not part of the original exhibit.

Later, Klas H. Eklund came up with an invention with REDACTED

REDACTED according to Power Integrations own expert Mr.

Shields. Exh. M, Shields Depo. 97:21-98:12. Dr. Eklund, however, did not file a patent application on his idea until April 24, 1987 – over 15 months after Dr. Beasom had already filed the application leading to the '173 Patent. Dr. Eklund's application issued on March 7, 1989 as U.S. Patent No. 4,811,075 ("the '075 patent"), a copy of which is attached hereto as Exhibit B.<sup>2</sup> The '075 patent was later assigned to Plaintiff Power Integrations, Inc. ("Power Integrations") and is now asserted against Defendants Fairchild Semiconductor International, Inc. and Fairchild Semiconductor Corporation (collectively, "Fairchild").

**B. Power Integrations Has No Evidence Corroborating An Earlier Invention By Dr. Eklund.**

Initially, Power Integrations stated that Dr. Eklund conceived of his invention in October, 1985. Exh. C, Power Integrations' Resp. to Interrogatory No. 8. Once Fairchild showed how the earlier '173 Patent anticipated the later '075 Patent, however, Power Integrations supplemented its interrogatory response to assert that the '075 Patent was conceived "in late 1984." Exh. D, Power Integrations' Supp. Resp. to 2nd and 3rd Sets of Interrogatories, Nos. 7 & 8.

While Dr. Eklund now claims to have conceived of his invention "in late 1984", Power Integrations has no independent evidence to corroborate this alleged conception and absolutely *no* evidence that Dr. Eklund reduced his invention to practice prior to his own filing date of April 24, 1987 – over fifteen months after Dr. Beasom filed his earlier application leading to the '173 Patent, or that he was diligently working at doing so.<sup>3</sup>

<sup>2</sup> Because of processing within the Patent Office, Eklund's later filed application actually issued before Dr. Beasom's '173 Patent. See Exhs. A and B. For purposes of § 102(e), however, issued United States patents are prior art as of their *filing dates* for exactly this reason. *In re Bartfeld*, 925 F.2d 1450, 17 USPQ2d 1885 (Fed. Cir. 1991); *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1376 (Fed. Cir. 1986). This is true even though they may issue after the patent in question. *Kloster Speedsteel AB v. Crucible Inc.*, 793 F.2d 1565, 230 USPQ 81 (Fed. Cir. 1986); *Sun Studs, Inc. v. ATA Equip. Leasing, Inc.*, 872 F.2d 978, 10 USPQ2d 1338, 1342 & n.3 (Fed. Cir. 1989).

<sup>3</sup> It is important to note that even if Power Integrations could establish that Dr. Eklund conceived of his invention in late 1984, which it cannot do based on the evidence produced in this case, Dr. Beasom is still the first to conceive. Dr. Beasom has produced consecutive dated, signed and witnessed pages from a laboratory notebook that establish that he conceived of the invention of claim 1 of the '075 Patent in April 1984. Exh. E

Power Integrations admits that there is very little potentially corroborating evidence:

Documents produced and provided for inspection by Mr. Eklund in this case, along with information from Mr. Eklund, Tom Schatzel, Ed Ross, Vahe Sarkissian, [and] Jan Brunnberg... *may* support the 1984 conception date and any resulting work to reduce the invention to practice.<sup>4</sup>

Exh. D, Power Integrations' Supp. Resp. to 2nd and 3rd Sets of Interrogatories, No. 7 (emphasis added). None of these sources later provided independent evidence corroborating Dr. Eklund's invention of the '075 Patent.

1. **Power Integrations has not produced documents independently corroborating an earlier date of invention by Dr. Eklund.**

The only documents alleged to corroborate the invention of the '075 Patent are six loose-leaf, handwritten notebook pages. Exh. G, Eklund Depo Exh. 1. Dr. Eklund admitted these pages are not signed or witnessed, do not constitute a single document, and one of them is not dated. Exh. H, Eklund Depo., 57:21-58:20. The lack of a date is critical since the pages were not found together and thus the date on one page cannot be imputed to other pages.

Moreover, various of Dr. Eklund's loose leaf pages are directed at different concepts and none of the pages completely disclose all of the elements of claim 1 of the '075 Patent, a fact admitted by Power Integrations' expert Dr. Shields. Power Integrations' experts claim, at best, that Dr. Eklund's own notes "corroborate" Dr. Eklund's *current* testimony. The notes themselves do not disclose the invention. Due to the utter lack of any corroborating evidence, however, it is not necessary for the Court to address these failings as well. Dr. Eklund also admits REDACTED

Exh. H, Eklund Depo., 56:16-57:24. Dr. Eklund claims that REDACTED Exh. H, Eklund Depo., 20:18-22:19. Dr. Eklund admits that REDACTED

Exh. H, Eklund Depo., 108:17-109:5. While some witnesses have stated they recall REDACTED

<sup>4</sup> At one time, Power Integrations also identified Mr. Lund as a potential witness. Power Integrations withdrew Mr. Lund's name, however, and agreed that he would not offer any testimony concerning Dr. Eklund's invention of the '075 Patent. Exh. F.



REDACTED

Exh. J, Ross

Depo., 36:14-37:4; 37:23-38:2; Exh. L, Brunnberg Depo., 47:1-48:7; Exh. K, Sarkissian Depo., 111:1-18.

2. Tom Schatzel cannot corroborate an earlier invention by Dr. Eklund.

Thomas Schatzel was Dr. Eklund's patent attorney and prosecuted the '075 Patent. Mr. Schatzel specifically testified that he cannot corroborate any invention of the '075 Patent earlier than the filing date of the patent itself:

Q.

A.

Q.

A.

Q.

REDACTED

A.

Q.

A.

Exh. I, Schatzel Depo., 38:20-39:13; *see also* 100:21-105:1. Thus, Mr. Schatzel can provide no evidence corroborating an earlier date of invention by Dr. Eklund.

Further, Mr. Schatzel cannot corroborate the existence of the documents that Dr. Eklund now claims evidence an earlier date of invention. Mr. Schatzel testified that he does not recall ever seeing documents indicating that Dr. Eklund conceived of his invention prior to April 24, 1987. Exh. I, Schatzel Depo., 33:10-35:15; 38:23-39:19; 64:15-66:9. Specifically, Mr.

Schatzel testified that while he has

REDACTED

REDACTED

REDACTED

Exh. I, Schatzel Depo., 35:8-15.

3. **Ed Ross cannot corroborate an earlier invention by Dr. Eklund.**

Like Mr. Schatzel, Mr. Ross testified that he could provide absolutely no evidence corroborating Dr. Eklund's invention, conception, or reduction to practice of the '075 Patent:

Q.

A.

Q.

REDACTED

A.

Q.

A.

Exh. J, Ross Depo., 24:3-21; *see also* 34:17-35:8.

Mr. Ross cannot corroborate Dr. Eklund's claims about documents that allegedly showed Dr. Eklund's invention. Mr. Ross specifically testified that

REDACTED

Exh. J, Ross Depo., 29:13-30:4.

While Power Integrations seems to rely upon Mr. Ross's testimony that

REDACTED

Exh. J, Ross Depo.,

36:14-37:8. Mr. Ross, however, could not recall anything about the case and never knew what it contained. *Id.*, Ross Depo., 37:14-38:2.

4. **Vahe Sarkissian cannot corroborate an earlier invention by Dr. Eklund.**

Vahe Sarkissian worked with Dr. Eklund at AMD. Mr. Sarkissian testified that he cannot corroborate an earlier date of invention or reduction to practice of any invention by Dr. Eklund:

Q.

A.

Q.

REDACTED

A.

Q.

A.

Exh. K, Sarkissian Depo., 104:23-105:16 and 107:1-13. Similarly, Mr. Sarkissian cannot corroborate any documents showing an earlier invention by Dr. Eklund. While Mr. Sarkissian has a vague recollection that Dr. Eklund may have shown him "pictures of things" (*id.*, Sarkissian Depo., 72:19-73:10), Mr. Sarkissian testified

REDACTED

. *Id.*, Sarkissian Depo., 75:8-77:3.

5. Jan Brunnberg cannot corroborate an earlier invention by Dr. Eklund.

In his deposition, Dr. Eklund claimed

REDACTED

Exh. H, Eklund Depo., 108:17-109:5. This purported notebook, however, has not been produced and Dr. Eklund now claims REDACTED Exh. H, Eklund Depo. 20:24-25:19.

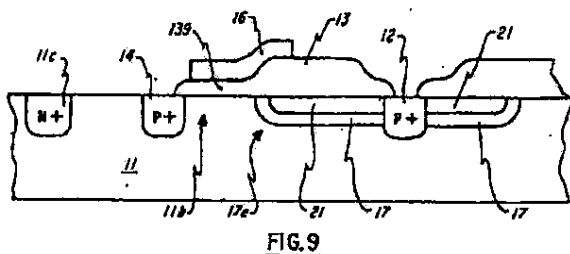
Mr. Brunnberg, however, was unable to corroborate Dr. Eklund's testimony or Dr. Eklund's invention of the '075 Patent. While Mr. Brunnberg claims he may have REDACTED Dr. Eklund over the course of a year, Mr. Brunnberg testified that he has no documents or records REDACTED Exh. L, Brunnberg Depo., 62:11-14.

Moreover, Mr. Brunnberg testified that he cannot recall what the notebook pages he signed actually showed. *Id.*, Brunnberg Depo., 63:4-8. Mr. Brunnberg, however, was confident that they were different from the unsigned, loose-leaf pages upon which Power Integrations now seeks to rely. *Id.*, Brunnberg Depo., 97:8-15.

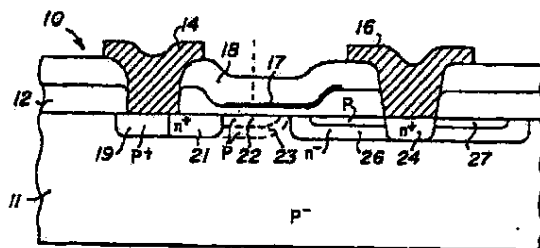
Thus, Mr. Brunnberg can provide absolutely no evidence corroborating an earlier date of invention by Dr. Eklund.

C. The Beasom '173 Patent Teaches Every Element Of Claim 1 Of The '075 Patent.

Figure 9 of the Beasom '173 Patent is essentially identical structurally to Figure 1 of the '075 Patent. While the Beasom '173 structure was disclosed as a p-channel transistor in Figure 9 and the Eklund '075 discloses an n-channel transistor, both patents disclosed that the other device could be created by merely swapping polarity of the region. For example, the Beasom Figure shows P+ source and drain pockets 14 and 12, respectively; the Eklund '075 Figure shows N+ source 21 and drain 24. This is not a disputed difference. Otherwise, the similarity is striking as can be seen from a side-by-side comparison of the drawings:



'173 Patent, Figure 9



'075 Patent, Figure 1

Power Integrations expert, Mr. Shields, directly admitted that

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Exh. M, Shields Depo. 97:21-98:12.

Mr. Shields is referring to the metal contacts shown in Eklund '075 Figure 1 as contacts 14 and 16 and the corresponding openings above the source 14 and drain 12 in Beasom '173 Figure 9. These metal contacts are for allowing the transistor to connect to the outside world. Without them, the transistor is unconnected and never operates. Fairchild's expert, Dr. Gwozdz, found that the source and drain contacts are disclosed in the '173 Patent, both expressly and inherently. Gwozdz Decl. ¶¶ 2-4. The drain contact is specifically referred to in the patent. Exh. A, '173 col. 1:21-23. Dr. Gwozdz's states that it is normal and customary in the art to refer to a "contact" as a "pocket," and thus that those of ordinary skill in the art would have understood the references to source "pocket" in the '173 Patent to include a contact. Dr. Gwozdz further states that the contact certainly was inherent in Figure 9 because a person of ordinary skill would understand that in order for the MOS transistor depicted in Figure 9 to operate, the source pocket must typically be connected to a contact to communicate to the outside world. *Id.*

Power Integration's expert, Mr. Shields, similarly concluded that

REDACTED

Ex. M, Shields Depo. 132:9-135:22; Gwozdz Decl. ¶ 4. That drawing showed a top down view of the device that, according to Mr. Shields, necessitated a source and drain with a contact from above. For the same reason, the contacts are inherent in Figure 5a of the '173 Patent, which also depicts a top down view of Beasom's invention.

**D. The '075 Patent Admits That Low Voltage And High Voltage Devices Can Be Built On The Same Chip.**

As the '075 Patent acknowledges, it was well known in the prior art to combine high

voltage MOS transistors with low voltage logic circuitry on the same integrated circuit:

2. Description of the Prior Art

Self isolation technology is used for making high voltage MOS devices, particularly integrated high voltage devices in combination with low voltage control logic on the same chip.

...

The main advantage is that low voltage control logic easily can be combined on the same chip

Exh. B, '075 Patent, 1:15-37. Power Integrations thus does not claim to have invented the combination of high voltage MOS devices with low voltage logic on the same chip.

III. ARGUMENT

A. Summary Judgment Of Invalidity Is Appropriate In Patent Cases.

Summary judgment is appropriate when there are no genuine issues of material fact and the moving party is entitled to judgment as a matter of law. *Johns Hopkins Univ. v. CellPro, Inc.*, 152 F.3d 1342, 1353 (Fed. Cir. 1998). A motion for summary judgment should be granted when the "pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." Fed.R.Civ.P. 56(c).

It is initially the burden of the party moving for summary judgment to establish that there is no genuine issue of material fact and that it is thereby entitled to judgment as a matter of law. *Celotex Corp. v. Catrett*, 477 U.S. 317, 324 (1986). Once Fairchild meets its initial burden, the burden of production shifts to Power Integrations to set forth specific facts showing that there is a genuine issue of material fact for trial. *Id.* at 322-23.

To carry its burden, Power Integrations must do more than simply show that there is some metaphysical doubt as to the material facts. *See Matsushita Elec. Indus. Co., v. Zenith Radio Corp.*, 475 U.S. 574, 586, 106 S. Ct. 1348, 1356 (1986). The mere existence of a scintilla of evidence is insufficient; there must be evidence on which the jury could reasonably find for

the non-moving party. *See Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 252, 106 S.Ct. 2505, 2512 (1986). Indeed, evidence that “is merely colorable, or is not significantly probative,” is not sufficient to avoid summary judgment. *Id.* at 249-250.

**B. The ‘173 Patent Is Prior Art Under 35 U.S.C. § 102(e).**

As a matter of law, the claims of the ‘075 Patent are invalid if “the invention was described in... a patent granted on an application for a patent by another filed in the United States before the invention by the applicant for patent.” 35 U.S.C. § 102(e)(2). Thus, there are only two issues the Court need consider – (i) whether Dr. Beasom’s ‘173 Patent was granted on an application filed before Dr. Eklund’s invention and (ii) whether the ‘173 Patent teaches every element of claims of the later ‘075 Patent. Since there is no genuine dispute of fact with respect to either issue, summary judgment is appropriate.

**1. The application leading to the ‘173 Patent was filed in the United States prior to Dr. Eklund’s invention of the ‘075 Patent.**

There is no possible dispute that the ‘173 Patent is “a patent granted on an application for a patent... filed in the United States” on January 7, 1986. *See* Exh. A. Thus, the burden shifts to Power Integrations to prove that Dr. Eklund invented his ‘075 Patent on or before January 6, 1986. *Celotex*, 477 U.S. at 322-23.

**2. Power Integrations has no independent evidence that Dr. Eklund both conceived of his invention and reduced it to practice prior to January 7, 1986**

To establish priority under Section 102(e), Power Integrations must show that Eklund *both* (i) conceived and (ii) reduced to practice the invention of claim 1 prior to January 7, 1986 – the filing date of the ‘173 Patent or was diligent in reducing the invention to practice. *See Mycogen Plant Sciences, Inc. v. Monsanto Co.*, 252 F.3d 1306, 1310 (Fed. Cir. 2001).

Conception is the mental act of invention and requires the formation “in the mind of the inventor, of a definite and permanent idea of the complete and operative invention, as it is thereafter to be applied in practice.” *Cooper v. Goldfarb*, 154 F.3d 1321, 1327 (Fed. Cir. 1998)

(internal citations omitted). An idea is definite and permanent when the inventor has a specific, settled idea, a particular solution to the problem at hand, not just a general goal or research plan he or she hopes to pursue. Conception is complete only when “the idea is so clearly defined in the inventor’s mind that only ordinary skill would be necessary to reduce the invention to practice, without extensive research or experimentation”. *Burroughs Wellcome Co. v. Barr Lab.*, 40 F.3d 1223, 1228 (Fed. Cir. 1994).

A reduction to practice can be actual or constructive. An actual reduction to practice requires that the claimed invention work for its intended purpose. A constructive reduction to practice occurs when a patent application disclosing the invention is filed. *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1376 (Fed. Cir. 1986) (internal citations omitted).

As a matter of law, to meet its burden of proving an earlier date of both conception and reduction to practice, Power Integrations must come forward with something more than Dr. Eklund’s testimony or documents. *Price*, 988 F.2d at 1187. Power Integrations must put forth **non-inventor evidence** corroborating any alleged conception and reduction to practice. *Hahn v. Wong*, 892 F.2d 1028, 1032 (Fed. Cir. 1989) (“The inventor, however, must provide **independent** corroborating evidence **in addition** to his own statements and documents.”) (emphasis added).

The straightforward purpose of corroboration is “to prevent fraud.” *Hahn*, 892 F.2d at 1033. While the adequacy of corroboration is viewed under the so-called “rule of reason”, adoption of this standard “has not altered the requirement that evidence of **corroboration must not depend solely on the inventor himself.**” *Cooper*, 154 F.3d at 1330 (emphasis added).

Power Integrations has no independent evidence that Dr. Eklund both conceived of and reduced his invention to practice prior to January 7, 1986, nor that he was diligent in doing so. Thus, the ‘173 Patent is § 102(e) prior art as a matter of law.



a. **Power Integrations cannot establish that Dr. Eklund conceived of his invention before January 7, 1986.**

While Dr. Eklund now testifies that he had his REDACTED  
September 26, 1984, this testimony is entirely uncorroborated. Exh. H, Eklund Depo., 57:21-58:20. The only possibly sources of corroborating evidence are (i) Dr. Eklund's own six loose leaf pages of handwritten notes and (ii) testimony by Messrs. Schatzel, Ross, Sarkissian, and Brunnberg. Exh. D, Power Integrations' Supp. Resp. to 2nd and 3rd Sets of Interrogatories, No. 7. There can be no dispute that none of this "evidence" corroborates an earlier date of conception by Dr. Eklund.

As a matter of law, Dr. Eklund's self-interested "evidence" cannot suffice. *Hahn*, 892 F.3d at 1032. His unbound, undated, unsigned and un-witnessed pages are of little value as corroborating evidence. See *Medichem, S.A. v. Rolabo, S.L.*, 437 F.3d 1157, 1173 (Fed. Cir. Feb. 2006) ("where the notebook has . . . not been maintained in reasonable accordance with good laboratory practices sufficient to reasonably ensure its genuineness..., then the corroborative value of the notebook is minimal"). Moreover, these pages are entirely in Dr. Eklund's handwriting. *Hahn v. Wong*, 892 F.2d 1028, 1032 (Fed. Cir. 1989). Thus, they cannot provide *independent* evidence corroborating the date of Dr. Eklund's invention.

The law is clear that Dr. Eklund's unwitnessed, handwritten notes simply cannot provide evidence of an earlier invention:

Since corroboration must be independent of the inventor, the inventor's notebooks unsigned by witnesses do not suffice since they are simply documents which he produced... and are merely self-serving declarations by the inventors....

*Ralston Purina Co. v. Far-Mar-Co., Inc.* 586 F.Supp. 1176, 222 USPQ 863 (D. Kan. 1984), *aff'd in part & rev'd in part*, 772 F.2d 1570, 227 USPQ 177 (Fed. Cir. 1985). This is not a dispute of fact, it is a question of law. "Regardless of the contents of the notebooks, unwitnessed laboratory notebooks on their own are insufficient to support his claim [of conception, and therefore] of co-inventorship." *Stern v. Trs. of Columbia Univ.*, 434 F.3d 1375, 1378 (Fed. Cir. 2006). Power Integrations simply cannot meet its burden of producing independent evidence of an earlier date of conception by Dr. Eklund.

Power Integrations must produce corroborating evidence that is independent of Dr. Eklund's own statements and handwritten documents. *Cooper*, 154 at 1330, citing *Reese v. Hurst*, 661 F.2d 1222, 1225 (C.C.P.A. 1981). It cannot meet this burden since each of the potential witnesses Power Integrations has identified has clearly and unambiguously stated that they cannot corroborate Dr. Eklund's date of invention. First, Messrs. Schatzel and Ross each testified that they can provide no evidence corroborating Dr. Eklund's invention of the '075 Patent. Exh. I, Schatzel Depo., 38:20-39:13 and Exh. J, Ross Depo., 24:3-21. Likewise, the most that Messrs. Sarkissian and Brunnberg recall is that they may have been shown drawings by Dr. Eklund at some unspecified time but cannot recall what these drawings showed. Exh. K, Sarkissian Depo., 73:7-14; Exh. L, Brunnberg Depo., 65:6-10.

Indeed, Mr. Brunnberg specifically testified that he did not understand the concepts or documents that Dr. Eklund asked him to sign because they were not in his field of knowledge. Exh. L, Brunnberg Depo., 40:20-42:1. As a matter of law, a corroborating witness must understand the invention. *See Hahn*, 892 F.2d at 1032. Therefore, Mr. Brunnberg can offer no testimony corroborating Dr. Eklund's invention.

**b. Power Integrations cannot establish that Dr. Eklund reduced his invention to practice before January 7, 1986, nor that he was diligent in attempting to do so.**

Even were Power Integrations able to corroborate that Dr. Eklund conceived of his invention before January 7, 1986 (it cannot because it lacks corroborating evidence), Power Integrations has absolutely no evidence – let alone, independent corroboration – that Dr. Eklund reduced his invention to practice before Dr. Beasom filed his '173 Patent, or that he was diligent in reducing his invention to practice.

Even Dr. Eklund cannot state with any certainty when he first reduced his invention to practice. For example, Dr. Eklund testified that

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Exh. H, Eklund Depo., 89:20-91:18. As a matter of law, this does not constitute reduction to practice since Dr. Eklund testified that

**REDACTED**

Exh. H, Eklund

Depo., 92:8-23; 94:2-6 (emphasis added). Later, Dr. Eklund testified that REDACTED

Exh. H, Eklund Depo., 92:17-93:1; 106:6-

9. Again, this is legally insufficient since Dr. Eklund testified that REDACTED

*Id.*, Eklund Depo., 97:7-24.

Indeed, Dr. Eklund admits that

REDACTED

Exh. H, Eklund Depo., 291:6-292:12. This evidence also does not suggest that Dr. Beasom was diligently pursuing reduction to practice of his alleged invention.

To establish an earlier priority date, Power Integrations must produce evidence that the claimed invention was implemented and worked for its intended purpose. *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1376 (Fed. Cir. 1986). Thus, even were Power Integrations able to produce evidence from Dr. Eklund concerning his reduction to practice of the '075 Patent, as a matter of law Power Integrations must also produce independent corroboration. The level of independent evidence necessary to corroborate reduction to practice is even a more stringent standard than that required to corroborate conception. *Singh v. Brake*, 222 F.3d 1362, 1370 (Fed. Cir. 2000); *Medichem, S.A., v. Rolabo, S.L.*, No. 05-1179,-1248 (Fed. Cir. Feb. 3, 2006). Power Integrations cannot meet this burden.

Power Integrations has produced no independent documents demonstrating a reduction to practice or diligence prior to January 7, 1986. Moreover, Messrs. Schatzel, Ross, and Sarkissian – three of Power Integrations' four potential corroborating witnesses – all specifically testified that they could not provide any evidence concerning Dr. Eklund's reduction to practice of his '075 Patent. Exh. I, Schatzel Depo., 38:20-39:13; Exh. J, Ross Depo., 24:3-21; Exh. K, Sarkissian Depo., 104:23-105:16. Mr. Brunnberg, the sole remaining witness, testified that

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Exh. L, Brunnberg

Depo., 89:11-16.

Since Power Integrations has no independent evidence corroborating a reduction to practice prior to January 7, 1986, the '173 Patent is prior art to the '075 Patent as a matter of law.

**C. The Prior Art '173 Patent Teaches Every Element Of Claim 1 Of The Later '075 Patent.**

If the prior art '173 Patent teaches every element of claim 1 of the '075 Patent, that claim is anticipated and, thus, invalid. 35 U.S.C. § 102(e). The elements of the claimed invention found in the prior art can be either inherent or disclosed expressly. *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 7 USPQ2d 1057 (Fed. Cir. 1988); *Standard Havens Prods., Inc. v. Gencor Indus., Inc.*, 953 F.2d 1360, 21 USPQ2d 1321 (Fed. Cir. 1992). To establish inherency, the evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill in the art to which the patent pertains. *In re Robertson*, 169 F.3d 743, 49 USPQ2d 1949 (Fed. Cir. 1999) (see also *Transclean Corp. v. Bridgewood Serv. Inc.*, 290 F.3d 1346, 62 USPQ2d 1865, 1871 (Fed. Cir. 2002). The patent challenger bears an evidentiary burden to establish that the limitation was necessarily present in the prior art. *Crown Oper. Int'l Inc. v. Solutia Inc.*, 289 F.3d 1367, 62 USPQ2d 1917 (Fed. Cir. 2002).

In his opening expert report, Fairchild's expert, Dr. Gwozdz compared the '173 Patent with claim 1 of the '075 Patent and showed how each element of claim 1 is disclosed in the '173 Patent. Gwozdz Decl. ¶ 2, Ex. A. Mr. Shields made no attempt in his rebuttal report to dispute Dr. Gwozdz' testimony that the '173 Patent fully disclosed claim 1. Indeed, during his deposition Mr. Shields

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Exh. M, Shields Depo.

97:21-98:12. The following chart demonstrates Dr. Gwozdz' and Mr. Shields' testimony that Beasom's '173 Patent disclosed the elements of claim 1 of the '075 Patent:

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REDACTED

REDACTED

Thus, claim 1 of the '075 Patent is anticipated by the Beasom '173 Patent specification and in particular Figure 9.

1. **Mr. Shields Cannot Create A Genuine Issue Of Fact By Contradicting His Own Testimony.**

Power Integrations' expert, Mr. Shields, explicitly admitted that Figure 9 of the '173 Patent contains all of the elements of claim 1 of the '075 Patent except the source and drain contacts:

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Exh. M, Shields Depo. 97:21-98:12.

Dr. Gwozdz found that the source and drain contacts are disclosed in the '173 Patent both expressly and inherently. Gwozdz Decl. ¶ 2. The drain contact is specifically referred to in the patent. ['173 col. 5:21-23] Also, Dr. Gwozdz's declaration establishes that it is normal and customary in the art to refer to a "contact" as a "pocket," and thus that those of ordinary skill in the art would have understood the references to source and drain "pockets" in the '173 Patent to

include a contact. Dr. Gwozdz further testified that even if it is deemed that the "contact" was not expressly shown because the metal contact layer was not depicted in Figure 9, the contact certainly was inherent. A person of ordinary skill would understand "contact" to refer to a doped pocket, or to an opening in an insulating layer, or to a metal contact, or to any combination of the three. Moreover, it is inherently understood that in order for the MOS transistor depicted in Figure 9 to operate, the source pocket must typically be connected to a contact. Gwozdz Decl. ¶¶ 2-4.

Although Mr. Shields made no attempt whatsoever to rebut this evidence in his rebuttal expert report, he made a half-hearted attempt to do so during his deposition. In particular, Mr. Shields argued that

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Exh. M, Shields

Depo. 126:17-127:5. Mr. Shields reluctantly agreed that

REDACTED

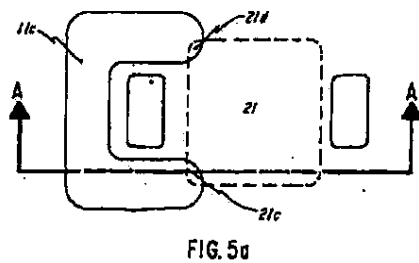
Exh.

M, Shields Depo. p. 82-88, 132-33. Fundamentally, Mr. Shields stated he did not fully appreciate the doctrine of inherency and was reluctant to state an unequivocal opinion. *Id.* Later in deposition, Mr. Shields subsequently was forced to admit, however, that top down source and drain contacts were inherent in the third drawing of Beasom's inventor notebook. Exh. M, Shields Depo. 132:9-135:22. That drawing showed

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Gwozdz Decl. ¶ 4.

Figure 5a of the '173 Patent is essentially the same as the third drawing in Beasom's inventor notebook. Gwozdz Decl. ¶ 4.



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'173 Patent, Figure 5a

Beasom Notebook, p.3

In light of the position taken by Power Integrations' expert, the sole issue regarding whether the Beasom '173 Patent anticipates each element of claim 1 is whether metal contacts are "necessarily present" in the Beasom '173 Patent specification. At the outset, the position is absurd. Without a doubt, connection from the outside world to the Beasom '173 device as shown in Figure 9 was required and known to a person of ordinary skill. In addition, the presence of the other regions which completely surround the source and drain region necessarily prevents any type of connection other than a vertical contact. This fact alone makes the presence of a vertical contact "necessarily present" in the Beasom '173.

In addition, the Beasom '173 Patent also references a prior art lateral semiconductor device in another patent from 1981. This reference provides express and complete disclosure of metal contacts. The specification of the Beasom '173 Patent, in the Field of Inventions section refers to Figure 7 of U.S. Patent 4,283,236. Exh. A, '173 Patent, Col. 1, line 46-49. This drawing is shown below and clearly shows the metal contacts above the N<sup>+</sup> and P<sup>+</sup> pockets in a lateral semiconductor device.

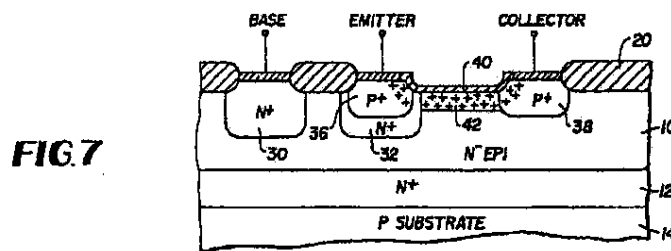


Figure 7, '236 Patent, Ex. N.

More importantly, the '236 patent provides written description of this figure and notes that this is merely the last step in processing the lateral device. The '236 patent states in this



regard:

"The process is completed by removing the thin oxide layer and forming metal contacts. These contacts are formed by the application of, for example, a metal layer and delineation of the metal layer to form the contacts and innerconnects (sic)."

Ex. N, U.S. Pat. No. 4,283,236, col. 4:41-45.

Since the Beasom '075 Patent referred directly to this particular patent and specifically to the above drawing, it must be treated as incorporated by reference and a part of the Beasom '173 Patent itself. *See Advanced Display Sys. v. Kent State Univ.*, 212 F.3d 1272, 1282 (Fed. Cir. 2000) ("Incorporation by reference provides a method for integrating material from various documents into a host document--a patent or printed publication in an anticipation determination--by citing such material in a manner that makes clear that the material is effectively part of the host document as if it were explicitly contained therein."); *Southern Clay Prods. v. United Catalysts, Inc.*, 43 Fed. Appx. 379, 383-384 (Fed. Cir. 2002) (same; use of express "incorporation by reference" language not necessary). The Beasom '173 Patent states that "[the] present invention relates to lateral semiconductor devices and an improved method of making lateral semiconductor devices." Critically, one of ordinary skill in the art would understand that metal contacts connected to the source and drain regions was clearly considered at the time the application for the Beasom '173 Patent was filed. It was merely a final step in creating an operable device that was considered too obvious.

Thus, due to express reference to the '236 patent and its final steps of forming the metal contact, the Beasom '173 expressly discloses the metal contacts to the source and drain contacts in Figure 9. Figure 9 of Beasom '173 therefore fully anticipates each and every element of claim 1 including the metal contacts to the outside world.

**D. Claim 5 of the '075 Patent Is Invalid for Obviousness Under 35 U.S.C. § 103.**

Non-obviousness means that an invention must not have been obvious to one with ordinary skill in the art to which the subject matter of the invention pertains at the time of the invention and in the light of the teachings of the prior art. 35 U.S.C. §103(a); *see generally* Barton, "Non-Obviousness," 43 IDEA: J.L. & Tech. 475 (2003). Nonobviousness is distinct from novelty in the sense that an invention may be obvious even though it is not identically disclosed anywhere in the art. *See Pro-Mold & Tool Co. v. Great Lakes Plastics*, 75 F.3d 1568, 1573 (Fed. Cir. 1996); *General Electric Co. v. Hoechst Celanese Corp.*, 740 F. Supp. 305, 320 (D. Del. 1990).

Claim 5 of the '075 Patent claims "[t]he high voltage MOS transistor of claim 1 combined on the same chip with a low voltage CMOS implemented device." This claim calls for combining the MOS transistor of claim 1 with low voltage CMOS implemented devices. It is inherent or it would have been obvious to combine the MOS transistor described by the '173 Patent on the same chip with a low voltage CMOS implemented device because it was well known to combine different types of electronic devices on the same chip of silicon, including high voltage and low voltage devices. In fact, Eklund quite clearly recognizes this because the first sentence of the "Description of Prior Art" section of the '075 Patent mentions the prior art combination of high voltage with low voltage: "Self isolation technology is used for making high voltage MOS devices, particularly integrated high voltage devices in combination with low voltage control logic on the same chip." Exh. B, '075 Patent, 1:16-19. Furthermore, Eklund goes on to explain how high voltage is designed in the prior art when he states that "...but the current capabilities of the devices are poor. The main advantage is that low voltage control logic easily can be combined on the same chip." *Id.* 1:34-37.


The '075 Patent claims an improvement of current capability, by means of reduced resistance due to a top layer. The '075 Patent introduces no independent novel or inventive feature regarding integration of low voltage devices with high voltage devices. CMOS was a well known technology at the time of the patent filing on April 24, 1987, so it would have been

obvious to one skilled in the art to use a high voltage MOS device such as the device in claim 1 in combination with low voltage CMOS. Thus, claim 5 of the '075 Patent is invalid for obviousness under 35 U.S.C. §103(a).

#### IV. CONCLUSION

For the foregoing reasons, Fairchild respectfully requests that the Court grant summary judgment that claims 1 and 5 of the '075 Patent are invalid in light of Dr. Beasom's '173 Patent.

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